

NATIONAL TRANSPORTATION SAFETY BOARD
DEPARTMENT OF TRANSPORTATION
WASHINGTON, D.C. 20591

AUG 19 1968

A-68-22

Mr. David D. Thomas
Acting Administrator
Federal Aviation Administration
Department of Transportation
Washington, D. C. 20590

Dear Mr. Thomas:

General McKee's letter of June 6, 1968, concerning the Boeing 727 takeoff warning system, has been received.

Action taken to place particular emphasis on knowledge of operational and procedural aspects of the takeoff warning system during training as well as pilot certification is gratifying. We believe, however, that further action is required.

It was found during the investigation of the United Air Lines 727 accident, that their Flight Operations Manual, although stating the reasons the horn would sound, contained no specific instructions on actions to be taken by the crew if the warning horn should sound during takeoff rolls. A review of some other Boeing 727 Flight Operations Manuals reveals no specific instructions to abort if the intermittent horn sounds before reaching V_1 in takeoff rolls.

We are aware that abort procedures are taught but understand that at least some are practiced by simulating an engine failure substantially before reaching V_1 . Also, during our investigation, we got the impression that United Air Lines personnel had been taught to understand the factors which activated the warning horn, but that no explicit instructions had been given to abort the takeoff if it sounded before reaching V_1 . There seems to have been some degree of prerogative which allowed the crew to devote some effort to correcting the cause of the horn to sound rather than to abort the takeoff at once. Other airline crews have admitted that, during takeoff rolls, they have been able to locate and to correct the condition which caused the horn to sound. One of the more common causes is that the APU door is not fully closed.

Mr. David D. Thomas (2)

We understand that United Air Lines has issued an operations alert which provides that takeoffs should be aborted if the intermittent horn sounds during takeoff rolls, and that the cause be corrected before another takeoff is attempted. We believe that this procedure should be required of all Boeing 727 operators.

We recommend that specific instructions be issued to all Boeing 727 operators which require that takeoffs be aborted if the intermittent warning horn sounds during takeoff rolls before reaching V₁.

Sincerely yours,

Original signed by

Joseph J. O'Connell, Jr.

Joseph J. O'Connell, Jr.
Chairman